COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Northern Virginia Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Covanta Fairfax, Inc.
Covanta Fairfax - Lorton, Virginia
Permit No. (NVRO- 71920)

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Covanta Energy, Inc. has applied for a Title V Operating Permit for its Covanta Fairfax facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date:

Regional Air Permit Manager: _____ Date:

FACILITY INFORMATION

Permittee
Covanta Fairfax, Inc
40 Lane Road
Fairfield, NJ. 07004

Facility
Covanta Fairfax, Inc.
9898 Furnace Road
Lorton, Virginia. 27079

County-Plant Identification Number: 51-059-0560

SOURCE DESCRIPTION

NAICS Code: NAICS [221320] – Municipal Waste Combustion

Covanta Fairfax, Inc. operates a large municipal solid waste (MSW) combustion facility with energy recovery. The facility maintains four 750 ton per day (nominal) waste combustion units with integrated reciprocating grate stokers and water wall boilers. Each combustor is also equipped with two natural gas-fired auxiliary burners that are used during startup, shutdown, and malfunction, and to provide flame stabilization. Products of combustion from each combustor are controlled by good combustion practices, ammonia injection (selective non-catalytic reduction), a combination of spray dyer and fabric filter, and activated carbon injection to reduce nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM and PM-10), acid gases, metals and complex organics among others. Steam generated by the boilers drive turbines that generate electricity for sale to the local electric company.

The facility operates under the Prevention of Significant Deterioration (PSD) Permit dated January 12, 1987, as amended February 18, 1988 and a Consent Agreement dated April 3, 1998, implementing Reasonably Available Control Technology. The requirements of the RACT consent agreement have been fulfilled. The facility is also subject to state Rule 4-54 (9 VAC 5-40-7950 et seq.) of the Virginia Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution. This rule implements various emissions limitations, operating, compliance, and record keeping requirements established by the Emissions Guidelines, Subpart Cb. Rule 4-54 is the

approved Clean Air Act Section 111(d)/129 plan for Large Municipal Waste Combustor (MWC) Units regulated under 40 CFR 62, Subpart VV sections 62.11640 through 62.11642 and was approved on October 29, 2004.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was last conducted September 20, 2006 with the next to occur in 2008. In addition, all reports and other data required by permit conditions or regulations, which are submitted to the Department of Environmental Quality (DEQ), are evaluated for compliance. Based on these compliance evaluations, the facility has been found to be in compliance with all state and federal applicable requirements with the exception of one issue. The facility was issued a Notice of Violation (NOV) on April 1, 2003, for processing of non-municipal solid waste ("supplemental waste"); that is, waste that does not meet the definition of MSW as defined in this permit. The facility no longer processes supplemental waste and the NOV was resolved September 22, 2006. No compliance plan is necessary.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
001-01 through 004-01	001 - 004	Ogden-Martin MSW Combustor with Martin-Stoker boiler system	343.75 MMBtu/hr	SNCR (ammonia injection), 2000	---	NO_x	PSD permit dated January 12, 1987 as amended February 18, 1988. NO_x RACT Consent Agreement dated April 3, 1998.
				Flakt spray dryer, 02/88	1,4,7, 10	SO_2 and MWC acid gases	
				Flakt fabric filter baghouse, 02/88	3,6,9, 12	MWC metals, PM/PM-10	
				activated carbon injection system	---	mercury	
001-02 A,B through 004-02 A,B	001 - 004	Zurn natural gas fired auxiliary burners (02/88)	103.125 MMBtu/hr	same	same	same	same
005	N/A	Cold Solvent Degreasers	N/A	N/A	---	---	---

*The size/rated capacity is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

A copy of the 2005 annual emission statement is attached. Emissions are summarized in the following table.

2005 Actual Emissions

Criteria or Hazardous Air Pollutant	Tons per Year
CO	44.19
NO_x	1,864.49
PM-10	14.99
PM-2.5	0.08
SO_2	124.58
VOC	5.69
Lead	0.01
Hydrogen Chloride	61.4
Hydrogen Flouride	0.64

EMISSION UNIT APPLICABLE REQUIREMENTS – 001-01 through 004-02

There are two primary regulatory mechanisms that form the basis of the majority of applicable requirements in this permit. They are the PSD permit issued January 12, 1987 (amended February 18, 1988) and Virginia State Air Pollution Control Board Rule 4-54 – Emissions Standards for Large Municipal Waste Combustors.

Rule 4-54, was promulgated on August 4, 1999, to carry out EPA's mandate to regulate existing (construction commenced on or before September 20, 1994) large MWCs as defined by Emission Guideline, Subpart Cb. EPA took direct final action approving this rule on October 29, 2004 making it federally enforceable. Rule 4-54 established emission limits, and monitoring, operating and recordkeeping requirements that are either more stringent than or additional to the existing PSD permit. It includes concentration-based emission limits for several criteria and hazardous air pollutants, establishes operating parameter limits on steam production, fabric filter inlet temperature and mercury injection system activated carbon feed. It also requires continuous and periodic compliance demonstration mechanisms including continuous emissions monitoring, operating parameter monitoring, performance testing, and record keeping and reporting.

Title V permit conditions reflect the more stringent requirements, the additional requirements and attempts to merge similar Rule 4-54, and PSD permit limits through the streamlining process. The citation(s) of each condition reflect the underlying requirements as appropriate.

Limitations

Control equipment requirements were obtained from the PSD permit and presented in Conditions III.A.1, 2, 3.

MSW and natural gas are the only fuels permitted to be combusted at this facility. DEQ has interpreted the PSD permit, its supporting documents and considered practical implications to develop a definition of acceptable MSW, as provided in Condition III.A.4. When developing this Condition, we made use of the language found in the definition of MSW contained in Rule 4-54. The operating permit definition identifies materials that are reasonably considered by DEQ to be MSW. The definition also identifies waste streams DEQ believes are not MSW and were not evaluated for their emissions characteristics when the decision to issue the original PSD permit was made. These materials are not currently considered acceptable wastes that can be processed by the facility and have therefore been excluded from the definition of MSW. DEQ does however acknowledge the practical implications of excluding from the definition of MSW materials that are collected from businesses in the region that fall within the excluded category. Therefore, the operating permit leaves room for the permittee to consider expanding the definition, provided certain steps are followed. Those steps are described in Condition III.A.4. Rules applicable to operating permit changes will be followed as provided in 9 VAC 5-80-190.

DEQ has interpreted the PSD, its supporting documents and considered practical implications to establish an effective MWC unit charging rate and the annual tonnage limit as shown in Conditions III.A. 7 and 8. We recognize the PSD permit's intent to acknowledge the importance of the variable energy content (higher heating value (HHV)) and/or moisture content of the waste stream relevant to the charging rate and tonnage limit. The PSD permit unfortunately does not clearly define an approach to make this connection. In the absence of an approach, we have established effective limits based on a moisture correction of 18% by weight (e.g., 750 tpd x 1.18 = effective charging rate of 885 tons, and 1,095,000 tpy x 1.18 = effective annual tonnage limit of 1,292,100 tons). This moisture content was obtained from the Camp, Dresser and Mckie document supporting the original PSD permit application. Condition 7 and 8 provides instructions to follow if they chose to obtain approval for alternative moisture corrections. Appendix A has been reserved to accommodate alternative values or

approaches that are approved and do not trigger significant Title V modification.

Condition III. B.2 establishes a compliance demonstration approach to Condition III.A. 7 and 8 utilizing waste measured on truck scales, as DEQ believes is implied by the PSD permit. DEQ however recognizes the value of using steam and other factors to reflect actual waste processed and have, in this condition, provided an avenue for the permittee to pursue establishing such an approach. Appendix B is reserved to accommodate approved approaches that do not trigger significant Title V modification.

Condition III.A.13, Proper Operation and Good Combustion Practices (GCP), is essentially a control requirement for NO_x, CO and VOC, and complex organics (specifically dioxin/furans), that blends the intent of PSD permit Condition 10 and 16 to control these emissions by good furnace design and proper operation, with Rule 4-54 requirements that serve the same purpose. This is not intended to define or emulate the methods to demonstrate GCP as prescribed by EPA in the background documents associated with the Emission Guidelines/NSPS for large MWCs. Specific GCP terms for this permit are defined quantitatively by achieving the operating parameter and emissions requirements indicated in the condition. Boiler roof top temperature above 1135 °F is authorized as a surrogate to furnace combustion temperature as referenced in the DEQ letter to Covanta identified as 93-03, dated October 1, 1993. A 4-hour block averaging period has been added to the furnace temperature requirement to coincide with the averaging periods applicable to parameters that are closely associated with or reflective of furnace conditions (e.g., CO emissions and unit load). The furnace temperature requirement does not apply when only auxiliary fuel is being fired or during periods of start-up and shutdown.

The following Virginia Administrative Codes (VAC) that have specific emission requirements have been determined to be applicable:

Concentration based emission limits were obtained from Rule 4-54 and are provided in Condition III.A.14. Mass emission limits provided in PSD permit Conditions 6 and 7 are reflected in Conditions III.A.16 and III.A.17, with the exception of arsenic, antimony, beryllium and hydrogen bromide. These four hazardous air pollutants were established as limits in the PSD permit under the state toxics program that is not federally enforceable. As a result, the limits for these four pollutants and their attendant monitoring, recordkeeping and reporting requirements have been moved to the State-only Requirements section of the operating permit. Sulfuric acid and hydrogen fluoride limits are retained in Condition III.A.17 because the facility is a major PSD source and significance levels exist for these pollutants. The visible emission limit in Condition IIIA.18 reflects the more stringent Rule 4-54 limit versus PSD Condition 20. The fugitive emission limit in Condition 19 reflects Rule 4-54 at 9 VAC 5-80-8070.

Requirements limiting municipal waste combustor unit load, fabric filter inlet temperature, activated carbon feed and duration of start-up/shutdowns obtained from Rule 4-54 are also provided in this section.

Parametric Monitoring

The monitoring requirements provided in this section mirror those obtained from the PSD permit or Rule 4-54. Some requirements contained in the PSD permit have been streamlined by the more relevant or more stringent requirements of Rule 4-54 and are not included.

Continuous Emissions Monitoring

The continuous emissions monitoring (CEM) requirements provided in this section mirror those obtained from the PSD permit or Rule 4-54.

A provision to conditions III.C.13, C.20, and C.27 was added to require Environmental Protection Agency (EPA) Region III approval of any alternative system used to provide substitute CEM emissions data during periods of CEM system breakdown, repair, calibration checks and zero and span adjustments. EPA must approve the use of any alternative monitoring system used for the purpose of demonstrating compliance. See the August 18, 2003 state plan (111(d)112 plan) submittal, Part 1-5, Discretionary Authority, relating to major changes to monitoring requirements.

Recordkeeping

The recordkeeping requirements provided in this section mirror those obtained from the PSD permit or Rule 4-54.

Performance Testing

Annual performance test requirements provided in this section mirror those obtained from the PSD permit and Rule 4-54. These tests, at a minimum, along with other monitoring requirements in this permit as derived from Rule 4-54, serve to satisfy periodic monitoring for all regulated pollutants.

No annual performance test requirements are provided for VOC, the only regulated pollutant for which an annual performance test or continuous emissions monitoring is

not required. Other conditions, such as Condition III.A.2, serve to periodically ensure that VOC emissions are maintained at levels consistent with the results of the initial performance test conducted following issuance of the original PSD permit.

A table of test methods has been included in the permit in the event testing is performed for pollutants for which no annual performance test is required. The Department of Environmental Quality (DEQ) and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The reporting requirements provided in this section mirror those obtained from the PSD permit or Rule 4-54. Submittal dates for the Emissions and Parametric Monitoring report and Compliance/Deviation report in this section have been tied to the submittal dates of the Recordkeeping and Reporting report required in Condition VIII.C, the annual compliance certification required in Condition VIII.D and permit deviation report required in Condition VIII.E for simplicity. The permittee may combine these reports as appropriate and as approved by the Air Compliance Manager in advance for the purpose of minimizing excess reporting.

Streamlined Requirements

Many requirements of the original PSD permit are no longer valid because they have been fulfilled, are less stringent, less appropriate than a requirement provided by Rule 4-54, are redundant or overlap with Rule 4-54. For these reasons, many conditions of the PSD permit are not directly incorporated or do not appear at all in the Title V permit. Those conditions that have been streamlined are indicated below with a brief description of the streamlining activity.

PSD permit Part I, Condition 1 – Not an applicable requirement.

Condition 2 – Permit application and supporting documents not applicable requirements.

Condition 3 – Operating manual requirements have been fulfilled and are also addressed by Rule 4-54 at 9 VAC 5-40-8130 F. (Condition IV.5 of Title V permit) requiring development and update of facility operating manual.

Condition 5 – The daily limit of 3,000 tons is redundant to the individual MWC charging rate of 750 tpd and therefore was not included.

Condition 6 and 7 –As discussed previously, many mass emission limits are effectively less stringent than the equivalent of Rule 4-54 concentration standards. The Title V permit reflects only the more stringent lb/hr and tpy limits. The PM and dioxin/furan concentration limits have been streamlined by the more stringent Rule 4-54 requirements.

Condition 10 – The emission standards and/or reduction efficiency requirements for SO_2, HCl, and HF provided by Rule 4-54 at 9 VAC 5-40-7960 C, -8020, and -8030 are at least as stringent as this condition.

Condition 14 – Initial performance test reporting has been fulfilled.

Condition 16 - These requirements have been incorporated into Condition III.A.13 as "Proper Operation and Good Combustion Practices."

Condition 17 – Ambient air quality monitoring has been completed. No additional monitoring was required. Requirement is obsolete.

Condition 19 – Process residue analysis was intended as a tool to evaluate the effectiveness of the combustion process to maximize complete combustion of the MSW at appropriate temperature. This in turn reduces the formation of gaseous pollutants, specifically complex organics. Rule 4-54 requirements such as minimum gaseous pollutant reduction efficiencies, unit load requirements and inlet fabric filter temperature requirements serve to minimize the necessity to continue process residue analysis. Therefore, process residue requirements have been streamlined out of the Title V permit.

Condition 20 – Rule 4-54 (9 VAC 5-40-8060) and PSD permit Condition 20 contain similar visible emission limits of 10 percent opacity. Condition 20 allows a 6-minute period of up to 30 percent opacity whereas 8060 does not. Therefore the Rule 4-54 limit is more stringent and is reflected in the permit.

Condition 21 – Provided as a State only requirement.

Condition 22 – Definition of MSW as provided in Condition III.A.4 excludes hazardous waste. Requirement to monitor waste stream for non-MSW is incorporated into Condition III.A.4.

Condition 23 – Standby Emission Reduction Plan has been submitted. Requirement is obsolete.

Part II – With the exception of the Conditions 7, 8, 9, 13, and 15, all requirements in Part II of the PSD permit have been fulfilled, are obsolete or are general conditions not applicable to this Title V permit.
Condition 7 – 9 VAC 5-80-8160 (Condition III.D.1) requires all records be maintained for 5 years instead of 2 years as required by the PSD permit.

Condition 8 and 9 - These requirements are incorporated into the Operating Training and Certification section, Conditions IV.A.1, IV.A.4, IV.A.5 and IV.A.8.

Facility Wide Conditions

Section IV incorporates Rule 4-54 requirements and PSD permit conditions related to MWC and air pollution control equipment supervisor and operator requirements including training, certification and record keeping. Control room operator "stand-in" provisions have been added to Condition IV.A.3, utilizing language contained in the proposed revisions to the MWC Emissions Guidelines (40 CFR 75350, December 19, 2005), to reflect the John Seitz memo (May 14, 1998) on this topic.

Section V incorporates state rule 4-47, Emission Standards for Solvent Metal Cleaning Operations in Northern Virginia Volatile Organic Compound Emissions Control Area.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality

Agency Policy Statement NO. 3-2001".

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors meeting the requirements of 9 VAC 5-50-410 or 9 VAC 5-40-41.

This general condition cites the sections that follow:

9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting]

This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.

J. Permit Modification

This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:
9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:
9 VAC 5-60-70. Designated Emissions Standards
9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

9 VAC 5-50-310, Odorous Emissions
9 VAC 5-50-320, Toxic Pollutants

This section identifies all of the PSD permit requirements that are related to odor or toxic pollutant emissions control.

FUTURE APPLICABLE REQUIREMENTS

<u>Compliance Assurance Monitoring</u>

Compliance Assurance Monitoring (CAM), 40 CFR Part 64, is applicable for certain regulated pollutants. CAM applies to any emission unit for which an emission standard has been established, uses a control device or devices to achieve compliance, and has potential pre-controlled emissions of a regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, for the source to be classified as a major source. Each MWC unit triggers CAM for a variety of pollutants (e.g., NOx, CO, SO2, PM-10, etc.).

However, a CAM plan was not required of this permittee since the application for this Title V permit preceded April 20, 1998 and there have been no subsequent significant permit revisions. A CAM plan will however be required at permit renewal or if a significant permit revision is required. A CAM plan will not be required to address those regulated pollutants that employ CEMS to demonstrate compliance.

Amendments to Emission Guidelines and Pending Revisions to Rule 4-54

On May 10, 2006, EPA promulgated amendments to the Emission Guidelines for Existing Sources: Large Municipal Waste Combustors and 40 CFR 60 Subpart Cb. These revisions establish some new emission limits, revised monitoring and testing requirements, among others, and are summarized below:

- Revisions to Subpart Cb are contained within 40 CFR 60.30b, 60.31b, 60.32b, 60.33b, 60.34b, Tables 1, 2 and 3.

- Provides more stringent emission limits as follows: cadmium – 35 micrograms per dry standard cubic meter (dscm), lead – 400 micrograms/dscm, and mercury 50 micrograms/dscm.

- Revise Subpart Eb to establish an 8-hour block average for measuring activated carbon injection rate.

- Revise annual mercury testing requirements to allow for optimization of mercury control operating parameters by waiving operating parameter limits during the mercury performance test and during the two weeks leading up to the test.

- Revises relative accuracy criterion for SO_2 and CO CEMS.

- Adds flexibility to annual compliance testing schedule. Requires a testing frequency that not less than nine months from and no more than fifteen months

from the previous test. But requires at least five tests in five calendar years.

- Allows use of parametric monitoring limits in lieu of testing for dioxin for facilities with exceptionally well operated MWC units. Facilities with two years in a row of test data showing less than 15 micrograms/dscm.

- Allows use of optional PM and mercury CEMS in lieu of annual stack testing.

- Allows use of optional multi-metal, hydrogen chloride and dioxin/furan CEMS in lieu of annual stack testing, only after EPA promulgates Performance Specifications.

- Allows monitoring of activated carbon injection pressure or equivalent parameter as method of determining activated carbon injection rate.

- Provides more stringent CEMS data availability requirements. Data must be available for at least 90 percent of the hours of operation per calendar quarter and 95 percent of the hours of operation per calendar year.

- Clarifies the exclusion of monitoring data from compliance calculations during periods of start-up, shutdown, or malfunction.

- Revises operator stand-in provisions to clarify how long a chief facility operator or shift supervisor is allowed to be off site when a provisionally certified control room operator is standing in. Discusses length of time a newly promoted or transferred shift supervisor or chief facility operator can serve in those positions before taking full certification exam.

Virginia is required to submit to EPA a revision to its section 111(d)/129 plan to implement and enforce all provisions of Subpart Cb, as amended on May 10, 2006, by April 28, 2007. These amendments will be implemented through revisions to Rule 4-54. In the approved State plan, compliance with the revised emission limits will be required no later than April 28, 2009, but Virginia may establish a more recent compliance date. EPA intends to promulgate a Federal Plan to implement Subpart Cb requirements by May 10, 2008, in the event a State does not have an approved 111(d)/120 plan implementing the amendments.

INAPPLICABLE REQUIREMENTS

The Beryllium NESHAP was found not to apply as documented in internal DEQ correspondence from Regional Engineer William Millward to Director, Source

Evaluation, dated September 15, 1986.

Amendments to Subpart E – Standards of Performance for Incinerators, promulgated on May 10, 2006, exempt from coverage under this subpart any facility, such as Covanta Fairfax, covered by an EPA approved State section 111(d)/129.

Amendments to Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, promulgated on February 27, 2006, exempt from coverage under this subpart any facility, such as Covanta Fairfax, covered by an EPA approved State section 111(d)/129 implementing Subpart Cb.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IU-1	Fuel Oil Storage Tank	9 VAC 9-80-720 B	VOC	N/A
IU-2	MSW Building/Pit	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-3	Non-ferrous Ash Building	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-4	Residue Ash Building	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-5	Lime Slaker Room	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-6	Ash Removal	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-7	Grizzly Scalper	9 VAC 9-80-720 B	PM and PM-10	N/A
IU-8	Hydraulic	9 VAC 9-80-720 B	PM and PM-10	N/A

	Shredder (in MSW Bldg.)			
IU-9	HVAC Boiler	9 VAC 9-80-720 C	PM and PM-10, SO_2, NO_x, CO and VOC	0.55 MMBtu/hr
IU-10	Emergency Diesel Generator	9 VAC 9-80-720 C	PM and PM-10, SO_2, NO_x, CO and VOC	435 hp
IU – 11	Lime Storage Silo Vent	9 VAC 9-80-720 B	PM and PM-10	N/A
IU – 12	Dolomitic Lime Silo	9 VAC 9-80-720 B	PM and PM-10	N/A
IU - 13	Carbon Silo Vent	9 VAC 9-80-720 B	PM and PM-10	N/A

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

PUBLIC PARTICIPATION

The draft permit will be placed on public notice in the Washington Times from February 27, 2006 to March 28, 2006.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

VALLEY REGIONAL OFFICE
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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

Amy Thatcher Owens
Regional Director

February 13, 2007

Mr. Lane Leonard
Senior Director of Division Manufacturing
Mohawk Industries, Inc. - Lees Carpets Division
404 Anderson Street
Glasgow, Virginia 24555

Location: Rockbridge County
Registration No.: 80269
Plant ID No.: 51-163-0001

Dear Mr. Leonard:

Attached is a significant amendment to your new source review permit dated March 22, 2002, as amended June 29, 2005 and August 31, 2006, to modify and operate a PVC carpet backing line (PVC1) and a calcium carbonate storage silo (PVCS-C1) in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The permit change is reflected in condition 8. This permit replaces your permit dated March 22, 2002, as amended June 29, 2005 and August 31, 2006.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on December 5, 2006.

This permit approval to modify and operate shall not relieve Mohawk Industries, Inc. - Lees Carpets Division of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please call Bobby Lute at (540) 574-7820.

Sincerely,

Larry M. Simmons, P.E.
Deputy Regional Director

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

This permit replaces your permit dated March 22, 2002, as amended June 29, 2005 and August 31, 2006.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Mohawk Industries, Inc. - Lees Carpets Division
404 Anderson Street
Glasgow, Virginia 24555
Registration No.: 80269
Plant ID No.: 51-163-0001

is authorized to modify and operate

a PVC carpet backing line (PVC1) and a calcium carbonate storage silo (PVCS-C1)

located at

404 Anderson Street
Glasgow, Rockbridge County, Virginia

in accordance with the Conditions of this permit.

Approved on March 22, 2002

Amended on June 29, 2005

Amended on August 31, 2006

Amended on February 12, 2007

Deputy Regional Director, Valley Region

Permit consists of 8 pages.
Permit Conditions 1 to 25.

PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses ( ) after each condition.

APPLICATION

1. Except as specified in this permit, the permitted facility is to be modified and operated as represented in the permit applications dated February 10, 2000, December 5, 2001, December 21, 2004, February 14, 2005, August 15, 2006 and November 30, 2006, including amendment information dated February 11 and 24, 2000, March 2 and 20, 2000 and May 18, 2005, supplemental information dated January 2 and 4, 2002, February 1 and 7, 2002, March 31, 2005 and April 21, 2005 and supplemental information received May 3, 2005. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-50-390 and 9 VAC 5-80-1210 D)

PROCESS REQUIREMENTS

2. **Equipment List** - Previously permitted equipment at this facility prior to the date of this permit consists of:

   - PVC carpet backing line rated at 1,800 square yards of fabric per hour (PVC1) (NESHAP, Subpart OOOO)

   - Calcium carbonate storage silo rated at 30 tons per hour (PVCS-C1)

   (9 VAC 5-80-1100)

3. **Emission Controls** - Particulate matter emissions from the PVC carpet backing line (PVC1) shall be controlled by a coalescing filter. The coalescing filter shall be provided with adequate access for inspection and shall be in operation when the PVC carpet backing line (PVC1) is operating.
(9 VAC 5-50-260)

4. **Emission Controls** - Particulate matter emissions from the calcium carbonate storage silo (PVCS-C1) shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection and shall be in operation when the calcium carbonate storage silo (PVCS-C1) is operating.
(9 VAC 5-50-260)

5. **Monitoring Devices** - The coalescing filter shall be equipped with a device to continuously measure the differential pressure drop across the coalescing filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the coalescing filter is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

6. **Monitoring Devices** - The fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

OPERATING/EMISSION LIMITATIONS

7. **Processing (P2) -** The calcium carbonate storage silo (PVCS-C1) shall process no more than 120.0 tons/day, calculated daily.
(9 VAC 5-80-1180)

8. **Processing (P2) -** The calcium carbonate storage silo (PVCS-C1) shall process no more than 42,000.0 tons/yr, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-1180)

9. **Throughput (P2) -** The throughput of plastisol formula to the PVC carpet backing line (PVC1) shall not exceed 283.5 tons/day, calculated daily.
(9 VAC 5-80-1180)

10. **Throughput (P2) -** The throughput of plastisol formula to the PVC carpet backing line (PVC1) shall not exceed 51,328.0 tons/yr, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-1180)

11. **Emission Limits (P2) -** Emissions from the operation of the PVC carpet backing line (PVC1) shall not exceed the limits specified below:

Particulate Matter	0.65	lbs/hr	1.50	tons/yr
PM-10	0.65	lbs/hr	1.50	tons/yr
Volatile Organic Compounds			5.81	tons/yr

(9 VAC 5-50-260 and 9 VAC 5-80-1180)

12. **Visible Emission Limit -** Visible emissions from the PVC carpet backing line (PVC1) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80 and 9 VAC 5-50-260)

13. **Visible Emission Limit** - Visible emissions from the calcium carbonate storage silo (PVCS-C1) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80 and 9 VAC 5-50-260)

14. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the PVC carpet backing line (PVC1) as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 63, Subpart OOOO.
(9 VAC 5-80-1180, 9 VAC 5-60-90 and 9 VAC 5-60-100)

RECORDS

15. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

    a. Daily hours of operation of the PVC carpet backing line (PVC1).

    b. Daily throughput of plastisol formula (in tons) used in the PVC carpet backing line (PVC1).

    c. Daily throughput of latex (in tons) used in the PVC carpet backing line (PVC1).

    d. Annual throughput of plastisol formula (in tons) used in the PVC carpet backing line (PVC1), calculated monthly as the sum of each consecutive 12-month period.

    e. Annual throughput of latex (in tons) used in the PVC carpet backing line (PVC1), calculated monthly as the sum of each consecutive 12-month period.

    f. Hourly particulate matter and PM-10 emissions (in pounds) from the PVC carpet backing line (PVC1), calculated as a daily average.

    g. Annual particulate matter, PM-10 and VOC emissions (in tons) from the PVC carpet backing line (PVC1), calculated as the sum of each consecutive 12-month period.

    h. Material Safety Data Sheets (MSDS) or other vendor information showing VOC content, HAP content, water content, and solids content for each component of the plastisol formula.

    i. Material Safety Data Sheets (MSDS) or other vendor information showing VOC content, HAP content, water content, and solids content for each component of the latex.

j. Daily throughput of calcium carbonate (in tons) used in the calcium carbonate storage silo (PVCS-C1).

k. Annual throughput of calcium carbonate (in tons) used in the calcium carbonate storage silo (PVCS-C1), calculated monthly as the sum of each consecutive 12-month period.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50)

16. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested.
(9 VAC 5-50-30 F)

NOTIFICATIONS

17. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Director, Valley Region, of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;

b. The expected length of time that the air pollution control equipment will be out of service;

c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;

d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B)

18. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Valley Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of

discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Region, in writing.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

GENERAL CONDITIONS

19. **Right of Entry** - The permittee shall allow authorized local, state and federal representatives, upon the presentation of credentials:

    a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

    b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

    c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

    d. To sample or test at reasonable times.

    For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
    (9 VAC 5-170-130 and 9 VAC 5-80-1180)

20. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
    (9 VAC 5-20-180 I and 9 VAC 5-80-1180)

21. **Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

22. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:

a. Knowingly makes material misstatements in the application for this permit or any amendments to it;

b. Fails to comply with the conditions of this permit;

c. Fails to comply with any emission standards applicable to the equipment listed in Condition 2;

d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;

e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted;

f. Fails to modify or operate this facility in accordance with the application for this permit or any amendments to it; or

g. Allows the permit to become invalid.

(9 VAC 5-80-1210 F)

23. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Valley Region, of the change in ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

24. **Registration/Update** - Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-20-160 and 9 VAC 5-170-60)

25. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)